

Table 1. Serotype Profile of Analyzed PR/HACCP Verification Samples by Calendar Year. Broilers - 'A' Sets - 1998 through 2001

<u>1998</u> Serotypes	% of Analyzed Samples	<u>1999</u> Serotypes	% of Analyzed Samples	<u>2000</u> Serotypes	% of Analyzed Samples	<u>2001</u> Serotypes	% of Analyzed Samples
Kentucky	2.46	Kentucky	2.78	Kentucky	2.18	Kentucky	3.93
Heidelberg	1.63	Heidelberg	2.04	Heidelberg	1.97	Heidelberg	2.90
Typhimurium (var. Copenhagen)	0.72	Hadar	1.23	Typhimurium (var. Copenhagen)	0.57	Typhimurium	0.75
Typhimurium	0.71	Typhimurium (var. Copenhagen)	0.77	Typhimurium	0.55	Typhimurium (var. Copenhagen)	0.39
Hadar	0.58	Typhimurium	0.61	Hadar	0.42	Montevideo	0.36
Schwarzengrund	0.37	Thompson	0.44	Montevideo	0.37	Schwarzengrund	0.36
Montevideo	0.28	Litchfield	0.24	Thompson	0.27	Hadar	0.35
Enteritidis	0.25	Infantis	0.22	Schwarzengrund	0.25	Thompson	0.29
Thompson	0.25	Schwarzengrund	0.18	Enteritidis	0.23	Enteritidis	0.19
Infantis	0.12	Istanbul	0.16	Berta	0.18	Berta	0.15
Istanbul	0.12						
Other serotypes	1.02	Other serotypes	1.51	Other serotypes	1.11	Other serotypes	1.35
Untypable isolates	0.69	Untypable isolates	0.64	Untypable isolates	0.46	Untypable isolates	0.69
Total serotyped isolates	9.21	Total serotyped isolates	10.80	Total serotyped isolates	8.54	Total serotyped isolates	11.70
Untyped isolates	1.63	Untyped isolates	0.61	Untyped isolates	0.55	Untyped isolates	0.19
Total positive isolates	10.83	Total positive isolates	11.41	Total positive isolates	9.09	Total positive isolates	11.89
Total number of analyzed samples	5,659	Total number of analyzed samples	6,768	Total number of analyzed samples	10,057	Total number of analyzed samples	8,955

Value listed for total serotyped isolates may not equal sum of individual serotypes, other serotypes, and untypable isolates due to rounding.

Value listed for total positive isolates may not equal sum of total serotyped isolates and untyped isolates due to rounding.

Table 2. Serotype Profile of Analyzed PR/HACCP Verification Samples by Calendar Year. Market Hogs - 'A' Sets - 1998 through 2001

<u>1998</u> Serotypes	% of Analyzed Samples	<u>1999</u> Serotypes	% of Analyzed Samples	<u>2000</u> Serotypes	% of Analyzed Samples	<u>2001</u> Serotypes	% of Analyzed Samples
Derby	0.94	Derby	2.08	Derby	1.28	Derby	1.25
Typhimurium (var. Copenhagen)	0.72	Typhimurium (var. Copenhagen)	0.57	Typhimurium (var. Copenhagen)	0.91	Infantis	0.32
Agona	0.36	Heidelberg	0.42	Johannesburg	0.46	Anatum	0.27
Schwarzengrund	0.29	Anatum	0.36	Infantis	0.39	Typhimurium (var. Copenhagen)	0.26
Heidelberg	0.22	Infantis	0.36	Heidelberg	0.33	Saintpaul	0.17
London	0.22	Johannesburg	0.36	Anatum	0.19	Heidelberg	0.16
Muenchen	0.22	Uganda	0.36	Typhimurium	0.17	Reading	0.16
Brandenburg	0.14	Agona	0.26	Minnesota	0.15	Johannesburg	0.14
Hadar	0.14	Manhattan	0.26	Brandenburg	0.14	Uganda	0.12
Infantis	0.14	Reading	0.26	Manhattan	0.14	Typhimurium	0.11
Typhimurium	0.14			Reading	0.14		
Worthington	0.14			Saintpaul	0.14		
				Senftenberg	0.14		
Other serotypes	0.79	Other serotypes	1.72	Other serotypes	0.99	Other serotypes	0.78
Untypable isolates	0.07	Untypable isolates	0.16	Untypable isolates	0.10	Untypable isolates	0.04
Total serotyped isolates	4.53	Total serotyped isolates	7.18	Total serotyped isolates	5.65	Total serotyped isolates	3.78
Untyped isolates	1.29	Untyped isolates	2.66	Untyped isolates	0.60	Untyped isolates	0.01
Total positive isolates	5.83	Total positive isolates	9.83	Total positive isolates	6.25	Total positive isolates	3.79
Total number of analyzed samples	1,390	Total number of analyzed samples	1,923	Total number of analyzed samples	5,170	Total number of analyzed samples	8,090

Value listed for total serotyped isolates may not equal sum of individual serotypes, other serotypes, and untypable isolates due to rounding.

Value listed for total positive isolates may not equal sum of total serotyped isolates and untyped isolates due to rounding.

Table 3. Serotype Profile of Analyzed PR/HACCP Verification Samples by Calendar Year. Cows/Bulls - 'A' Sets - 1998 through 2001

<u>1998</u> Serotypes	% of Analyzed Samples	<u>1999</u> Serotypes	% of Analyzed Samples	<u>2000</u> Serotypes	% of Analyzed Samples	<u>2001</u> Serotypes	% of Analyzed Samples
Derby	0.56	Kentucky	0.26	Newport	0.30	Montevideo	0.32
Muenchen	0.56	Muenster	0.26	Muenster	0.25	Anatum	0.23
		Montevideo	0.20	Montevideo	0.20	Kentucky	0.23
		Typhimurium	0.20	Typhimurium	0.20	Typhimurium	0.18
		Typhimurium (var. Copenhagen)	0.13	Kentucky	0.15	Dublin	0.14
		Anatum	0.07	Meleagridis	0.15	Newport	0.14
		Berta	0.07	Typhimurium (var. Copenhagen)	0.15	Albany	0.09
		Derby	0.07	Eleven serotypes - each identified	0.05	Heidelberg	0.09
		Give	0.07			Mbandaka	0.09
		Litchfield	0.07			Meleagridis	0.09
		London	0.07			Newbrunswick	0.09
		Mbandaka	0.07			Reading	0.09
		Meleagridis	0.07			Typhimurium (var. Copenhagen)	0.09
		Newport	0.07				
Other serotypes	0.00	Other serotypes	0.00	Other serotypes	0.00	Other serotypes	0.46
Untypable isolates	0.00	Untypable isolates	0.20	Untypable isolates	0.05	Untypable isolates	0.05
Total serotyped isolates	1.12	Total serotyped isolates	1.84	Total serotyped isolates	2.01	Total serotyped isolates	2.39
Untyped isolates	0.00	Untyped isolates	0.33	Untyped isolates	0.15	Untyped isolates	0.05
Total positive isolates	1.12	Total positive isolates	2.17	Total positive isolates	2.16	Total positive isolates	2.44
Total number of analyzed samples	179	Total number of analyzed samples	1,521	Total number of analyzed samples	1,995	Total number of analyzed samples	2,176

Value listed for total serotyped isolates may not equal sum of individual serotypes, other serotypes, and untypable isolates due to rounding.

Value listed for total positive isolates may not equal sum of total serotyped isolates and untyped isolates due to rounding.

Table 4. Serotype Profile of Analyzed PR/HACCP Verification Samples by Calendar Year. Steers/Heifers - 'A' Sets - 1998 through 2001

<u>1998</u> Serotypes	% of Analyzed Samples	<u>1999</u> Serotypes	% of Analyzed Samples	<u>2000</u> Serotypes	% of Analyzed Samples	<u>2001</u> Serotypes	% of Analyzed Samples
		Heidelberg	0.13	Montevideo	0.18	Derby	0.24
		Panama	0.13	Minnesota	0.09	Dublin	0.12
				Typhimurium (var. Copenhagen)	0.09	Cerro	0.06
						Heidelberg	0.06
						Kentucky	0.06
						Montevideo	0.06
						Saintpaul	0.06
Other serotypes	0.00						
Untypable isolates	0.00						
Total serotyped isolates	0.00	Total serotyped isolates	0.26	Total serotyped isolates	0.37	Total serotyped isolates	0.65
Untyped isolates	0.00						
Total positive isolates	0.00	Total positive isolates	0.26	Total positive isolates	0.37	Total positive isolates	0.65
Total number of analyzed samples	214	Total number of analyzed samples	782	Total number of analyzed samples	1,092	Total number of analyzed samples	1,695

Value listed for total serotyped isolates may not equal sum of individual serotypes, other serotypes, and untypable isolates due to rounding.

Value listed for total positive isolates may not equal sum of total serotyped isolates and untyped isolates due to rounding.

Table 5. Serotype Profile of Analyzed PR/HACCP Verification Samples by Calendar Year. Ground Beef - 'A' Sets - 1998 through 2001

<u>1998</u> Serotypes	% of Analyzed Samples	<u>1999</u> Serotypes	% of Analyzed Samples	<u>2000</u> Serotypes	% of Analyzed Samples	<u>2001</u> Serotypes	% of Analyzed Samples
Anatum	1.00	Montevideo	0.90	Montevideo	0.40	Montevideo	0.39
Montevideo	0.69	Anatum	0.43	Senftenberg	0.31	Newport	0.30
Meleagridis	0.54	Muenster	0.28	Newport	0.26	Anatum	0.26
Muenster	0.54	Typhimurium	0.22	Typhimurium (var. Copenhagen)	0.24	Muenster	0.21
Hadar	0.31	Cerro	0.20	Anatum	0.21	Kentucky	0.19
Typhimurium (var. Copenhagen)	0.31	Kentucky	0.19	Typhimurium	0.20	Typhimurium	0.15
Infantis	0.23	Mbandaka	0.17	Cerro	0.16	Mbandaka	0.15
Kentucky	0.23	Typhimurium (var. Copenhagen)	0.17	Muenster	0.14	Cerro	0.11
Newport	0.23	Meleagridis	0.14	Mbandaka	0.14	Typhimurium (var. Copenhagen)	0.10
Reading	0.23	Newport	0.13	Kentucky	0.13	Reading	0.07
Other serotypes	1.16	Other serotypes	1.11	Other serotypes	0.87	Other serotypes	0.76
Untypable isolates	0.08	Untypable isolates	0.04	Untypable isolates	0.07	Untypable isolates	0.06
Total serotyped isolates	5.56	Total serotyped isolates	3.97	Total serotyped isolates	3.14	Total serotyped isolates	2.76
Untyped isolates	0.85	Untyped isolates	0.37	Untyped isolates	0.15	Untyped isolates	0.07
Total positive isolates	6.40	Total positive isolates	4.34	Total positive isolates	3.29	Total positive isolates	2.83
Total number of analyzed samples	1,296	Total number of analyzed samples	16,375	Total number of analyzed samples	32,844	Total number of analyzed samples	24,243

Value listed for total serotyped isolates may not equal sum of individual serotypes, other serotypes, and untypable isolates due to rounding.

Value listed for total positive isolates may not equal sum of total serotyped isolates and untyped isolates due to rounding.

Table 6. Serotype Profile of Analyzed PR/HACCP Verification Samples by Calendar Year. Ground Chicken - 'A' Sets - 1998 through 2001

<u>1998</u> Serotypes	% of Analyzed Samples	<u>1999</u> Serotypes	% of Analyzed Samples	<u>2000</u> Serotypes	% of Analyzed Samples	<u>2001</u> Serotypes	% of Analyzed Samples
Thompson	4.17	Hadar	4.04	Kentucky	3.14	Heidelberg	4.96
		Heidelberg	2.36	Heidelberg	2.17	Schwarzengrund	3.82
		Typhimurium (var. Copenhagen)	2.02	Typhimurium (var. Copenhagen)	1.45	Kentucky	3.44
		Typhimurium	1.68	Hadar	0.72	Typhimurium	1.91
		Istanbul	0.67	Typhimurium	0.72	Hadar	0.76
		Reading	0.67	Infantis	0.48	Thompson	0.76
		Enteritidis	0.34	Newport	0.48	Brandenburg	0.38
		Infantis	0.34	Thompson	0.48	Johannesburg	0.38
		Litchfield	0.34	Berta	0.24	Ohio	0.38
		Newington	0.34	Enteritidis	0.24	Typhimurium (var. Copenhagen)	0.38
		Schwarzengrund	0.34	Reading	0.24		
		Thompson	0.34	Schwarzengrund	0.24		
Other serotypes	0.00						
Untypable isolates	0.00	Untypable isolates	1.35	Untypable isolates	1.21	Untypable isolates	1.91
Total serotyped isolates	4.17	Total serotyped isolates	14.81	Total serotyped isolates	11.84	Total serotyped isolates	19.08
Untyped isolates	0.00	Untyped isolates	1.35	Untyped isolates	1.93	Untyped isolates	0.38
Total positive isolates	4.17	Total positive isolates	16.16	Total positive isolates	13.77	Total positive isolates	19.47
Total number of analyzed samples	24	Total number of analyzed samples	297	Total number of analyzed samples	414	Total number of analyzed samples	262

Value listed for total serotyped isolates may not equal sum of individual serotypes, other serotypes, and untypable isolates due to rounding.

Value listed for total positive isolates may not equal sum of total serotyped isolates and untyped isolates due to rounding.

Table 7. Serotype Profile of Analyzed PR/HACCP Verification Samples by Calendar Year. Ground Turkey - 'A' Sets - 1998 through 2001

<u>1998</u> Serotypes	% of Analyzed Samples	<u>1999</u> Serotypes	% of Analyzed Samples	<u>2000</u> Serotypes	% of Analyzed Samples	<u>2001</u> Serotypes	% of Analyzed Samples
Hadar	6.09	Hadar	6.86	Heidelberg	5.16	Heidelberg	6.35
Heidelberg	5.92	Heidelberg	5.81	Hadar	3.68	Senftenberg	3.46
Senftenberg	3.55	Senftenberg	2.57	Agona	2.26	Hadar	2.69
Reading	2.88	Reading	2.48	Senftenberg	2.00	Arizona	1.92
Schwarzengrund	2.88	Muenster	1.71	Schwarzengrund	1.87	Reading	1.92
Muenster	1.18	Agona	1.52	Reading	1.42	Agona	1.54
Saintpaul	1.18	Saintpaul	1.24	Saintpaul	1.16	Newport	1.35
Anatum	0.85	Schwarzengrund	1.14	Muenster	0.77	Saintpaul	0.96
Kentucky	0.85	Typhimurium (var. Copenhagen)	1.14	Brandenburg	0.64	Schwarzengrund	0.77
Typhimurium	0.85	Typhimurium	0.67	Arizona	0.52	Derby	0.58
				Muenchen	0.52	Typhimurium	0.58
						Worthington	0.58
Other serotypes	5.42	Other serotypes	5.14	Other serotypes	3.93	Other serotypes	2.88
Untypable isolates	0.17	Untypable isolates	0.67	Untypable isolates	0.26	Untypable isolates	0.00
Total serotyped isolates	31.81	Total serotyped isolates	30.95	Total serotyped isolates	24.18	Total serotyped isolates	25.58
Untyped isolates	4.74	Untyped isolates	0.67	Untyped isolates	1.55	Untyped isolates	0.58
Total positive isolates	36.54	Total positive isolates	31.62	Total positive isolates	25.73	Total positive isolates	26.15
Total number of analyzed samples	591	Total number of analyzed samples	1,050	Total number of analyzed samples	1,551	Total number of analyzed samples	520

Value listed for total serotyped isolates may not equal sum of individual serotypes, other serotypes, and untypable isolates due to rounding.

Value listed for total positive isolates may not equal sum of total serotyped isolates and untyped isolates due to rounding.